

REMARKS

Claims 14-30 are pending of which claims 14-19 are allowed and claims 20, 25, and 30 stand rejected. Claims 21-24 and 26-29 are objected to as being dependent on rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and intervening claims.

Les Boegemann (registration #50,121), a representative of the applicant, contacted the Examiner by telephone on April 5, 2005 to discuss possibly allowing the rejected claims. As a result of this conversation, the Examiner requested that the applicant submit this AFTER FINAL REQUEST FOR RECONSIDERATION. Because the applicant seeks to traverse the Examiner's arguments, as presented in the office action of March 22, 2005, the applicant has elected to leave the objected claims in their current form for the present time. Should the arguments submitted below prove not to be persuasive, the applicant and his representative request sufficient notice so that the objected claims may be amended.

The Examiner rejected claims 20, 25, and 30 under 35 U.S.C. 102(a) as being unpatentable over Sun [Sun StorEdge™ SCSI Target emulation (STE) 1.1 Release Notes]. Sun discloses connecting a host computing device to a storage server and accessing **attached**

storage as if it were one or more SCSI target devices (p. 3, paragraph 1). The Sun device consists of target emulation software and Fibre Channel Host Adapter Boards that allow multiple LUNs to be configured on a single Fibre Channel port (p. 3, paragraph 2) and a cache for receiving SCSI commands (p. 5). The cache issues input/output requests to the physical devices in the attached storage only as needed. However, it is important to note that Sun does not address the unique problems associated with using Fibre Channel protocols.

The applicant wishes to distinguish the instant invention from that taught by Sun on two grounds. The first is that the Examiner has failed to address a limitation of one of our elements, namely that a converted address **corresponds to a device not currently connected** (see claims 20, 25, and 30). This limitation is neither disclosed or implied by Sun. In fact, Sun describes an addressing scheme for **currently attached** devices (see above).

The second ground for traversal is that the Examiner is attributing more to the prior art than is warranted. For example, the Examiner indicates that the use of the term "module mapping," as used by Sun, corresponds to mapping of logical ports to physical ports. Additionally, the Examiner states that the terms "modules coming and going" and "ports coming and

going," as used by Sun, correspond to the coupling and uncoupling of peripheral devices to the ports.

With regard to "module mapping," this term may refer to a plurality of disparate addressing schemes, most of which do not involve addressing for non-connected devices. Because Sun does not specifically disclose an addressing scheme for non-connected devices, the applicant respectfully submits that such an attribution by the Examiner is unwarranted.

With regard to the terms "modules coming and going" and "ports coming and going," the Examiner again attributes to Sun more than that which is disclosed. These terms, as used by Sun, may refer to a plethora of disparate conditions or circumstances. In fact, the use of these terms, as interpreted by one of ordinary skill in the art, would best describe a condition wherein modules and ports have been powered down for service, have been remapped or re-addressed, or have experienced some form of failure. This interpretation is supported by the fact that, while modules may be physically disconnected, ports may not. A disclosure by Sun that includes both modules and ports "coming and going" would indicate that this behavior is caused

by something *other than physical disconnection*. Because Sun does not teach *fetching* and *coupling* peripheral devices, the applicant respectfully submits that the Examiner's attribution is unwarranted and unsupported.

The following discussion is provided as background information for the applicant's previous statements. As stated in the background of the instant application, the fibre channel protocol employs two kinds of ports. "N" ports are coupled to peripheral devices with which a computer communicates, and so-called "fabric" ports are switches within a network of switches that is termed a fabric. The fiber channel protocol presumes communication through switches and N ports and, therefore, presumes direct communication with the peripheral devices (p. 1, line 18 through p. 2, line 7).

A problem arises whenever the fibre channel protocol is to be used for communicating with N ports to which no devices are currently connected. This situation occurs, for example, in a library of computer memory elements wherein shelved storage elements must typically be brought to an input/output station for connection to a port some time after the address identifying the storage element is received (p. 2, lines 7-12). As noted, the fiber channel protocol utilizes two types of ports with a presumed direct connection to peripheral devices.

However, Sun does not explore accommodating this unique requirement of the fiber channel protocol. In fact, the hierarchical nature of the fiber channel protocol itself would lead one to utilize well-known and economical solutions such as switches, routers, and bridges as obvious extensions of the fiber channel protocol.

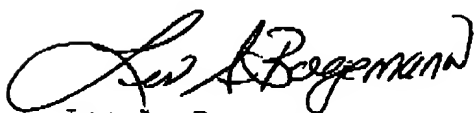
Also as previously noted, the fiber channel protocol presumes a direct connection to a targeted peripheral device (p. 1, line 18 through p. 2, line 7). This causes a delay that prevents a host computer from addressing the peripheral device as intended without additional action. Two potential solutions are presented in the instant application, namely, (a) instructing the host computer to hold off any read or write operations until the peripheral device is ready (p. 6, lines 9-11, new claims 22, 27), and (b) cache data if the host computer is attempting to write and retrieving data from the cache if the computer is attempting to read (p. 6, lines 11-14, new claims 23, 28, and 30). In contrast, Sun does not teach delaying a read/write operation until the peripheral device is ready.

For the reasons stated above, the device described by Sun is believed to be patentably different from the present invention. As such, the applicant respectfully submits that new claims 20, 25, and 30 are not anticipated by Sun. In view of the

foregoing, the applicant believes that Claims 20-30 recite allowable subject matter and respectfully requests reconsideration of the rejection and objections. As always, the applicant and his attorney thank the Examiner for the thorough examination of the application.

Please charge any charges incurred with this response to our Deposit Account No. 17-0055.

Respectfully submitted,



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